

Note:

"EB" on the packaging indicates the United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

Panasonic

CD Stereo System

Operating Instructions

Model No. **SC-PM19**

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Dear customer

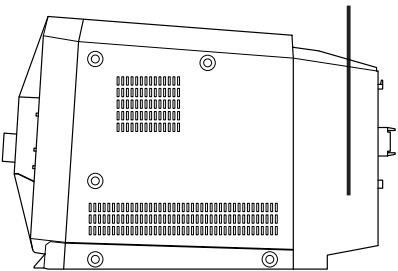
Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.

These operating instructions are applicable to the following system.

System	SC-PM19
Main unit	SA-PM19
Speakers	SB-PM19



LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT



Side of product

CAUTION	- INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. EC00825-1/ Class 3b
VARNING	- ÖSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.
ADVARSEL	- USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ADVARSEL	- USYNLIG LASERSTRÅLING NÄR DEKSEL ÄPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARO!	- AVIITTAESSA OIET NÄKYMATÖNTÄ, ALTIINNA LASERÄITELVILLÄ. ÄLÄ KATSO SÄTEESEEN.
VORSICHT	- UNSICHTBARE LASERSTRAHLUNG, WEENN ABDECKUNG GEOFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION	- RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
注意	- 打开时有不可见激光辐射。避免激光束照射。
注意	- ここを開くと不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。 RQLXS0055

Inside of product
Tuotteen sisällä
Produktets innsida

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

Safety precautions

Placement

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Place it at least 15 cm away from wall surfaces to avoid distortion and unwanted acoustical effects.

Do not place heavy items on the unit.

Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.

Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

The socket outlet shall be installed near the equipment and easily accessible or the mains plug or an appliance coupler shall remain readily operable.

Laite tulee asettaa lähelle verkkopistorasiaa ja pistokkeen täytyy olla sellaisessa asennossa, että siihen on helppo tarttua ongelman sattuessa.

Utstyret bør plasseres i nærheten av AC-stikkkontakten, og støpslet må være lett tilgjengelig hvis det skulle oppstå problemer.

Supplied accessories



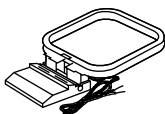
Please check and identify the supplied accessories.
Use numbers indicated in parentheses when asking for replacement parts.

- ☐ **AC mains lead** 1 pc.

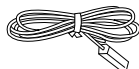
For the United Kingdom (RJA0053-3X) **For Australia and N.Z.** (K2CJ2DA00010) **For others** (K2CQ2CA00002)



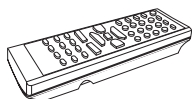
- ☐ **AM loop antenna** 1 pc.
(N1DAAA00001)



- ☐ **FM indoor antenna** 1 pc.
(RSA0007-L)



- ☐ **Remote control transmitter** 1 pc.
(EUR7711150)



- ☐ **Remote control batteries** 2 pcs.
R6, AA, UM-3



- ☐ **Antenna plug adaptor** 1 pc.
For the United Kingdom only (K1YZ02000013)



For the United Kingdom and Republic of Ireland

shop@Panasonic

www.panasonic.co.uk (for UK customers only)

- Order accessory and consumable items for your product with ease and confidence by telephoning our Customer Care Centre Mon–Friday 9:00 am–5:30 pm. (Excluding public holidays.)
- Or go on line through our Internet Accessory ordering application.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!

Customer Care Centre

For UK customers: 08705 357357

For Republic of Ireland customers: 01 289 8333

Technical Support

For UK customers: 0870 1 505610

This Technical Support Hot Line number is for Panasonic PC software related products only.

For Republic of Ireland, please use the Customer Care Centre number listed above for all enquiries.

For all other product related enquiries, please use the Customer Care Centre numbers listed above.

Caution for AC Mains Lead

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

IMPORTANT


The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

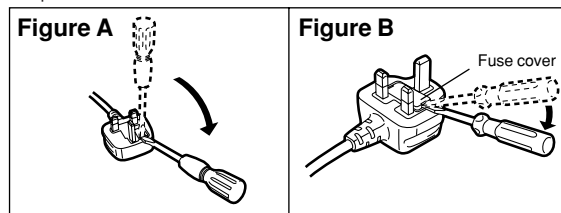
Remove the connector cover.

How to replace the fuse

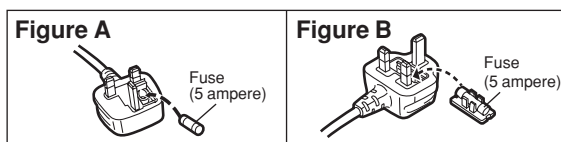
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

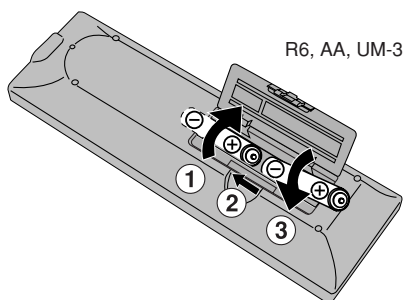
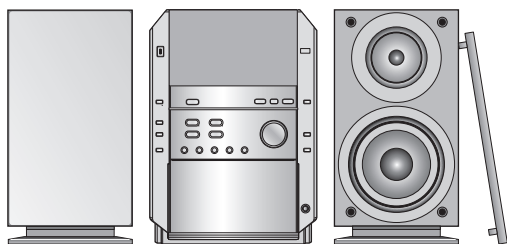
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



A**B****A The remote control****■ Batteries**

- Insert so the poles (+ and –) match those in the remote control.
- Do not use rechargeable type batteries.

Do not:

- mix old and new batteries.
- use different types at the same time.
- heat or expose to flame.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

■ Use

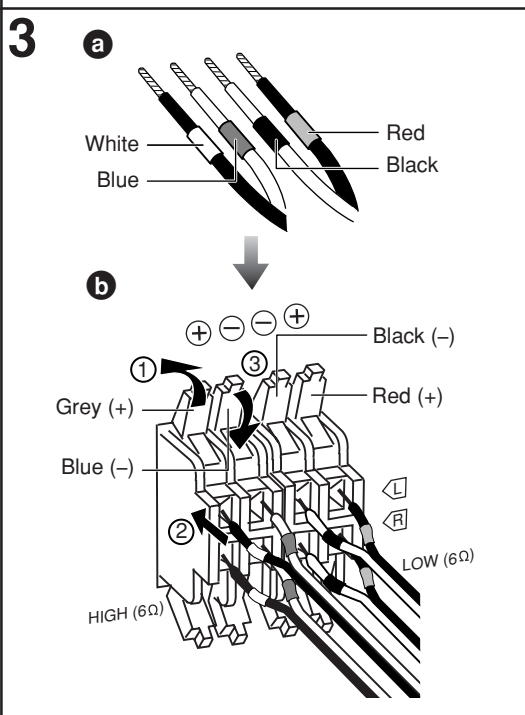
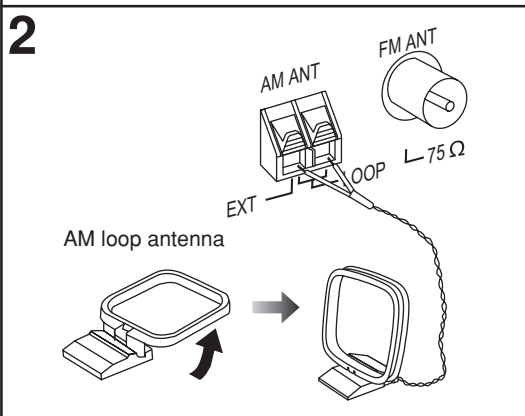
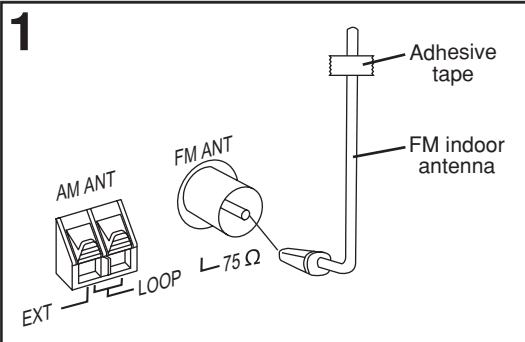
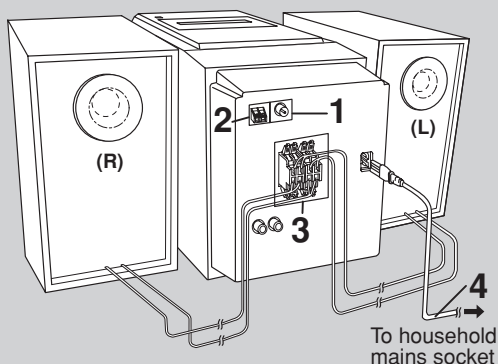
Aim at the remote control sensor, avoiding obstacles, at a maximum range of 7 m (23 feet) directly in front of the unit. Refer to page 7 for the remote control sensor position.

B Placement of speakers

Speakers are designed identically so that no left or right channel orientation is necessary.

Notes

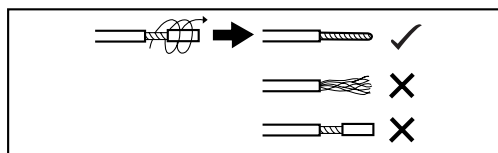
- Keep your speakers at least 10 mm away from the system for proper ventilation.
- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- To avoid damage to the speakers, do not touch the speaker cones if you have taken the nets off.



Connections

Plug the AC mains lead into a household mains socket only after all other connections have been made.

- To prepare the AM loop antenna wire and speaker cords, twist the vinyl cover tip and pull off.



1 Connect the FM indoor antenna.

Tape the antenna to a wall or column, in a position where radio signals are received with the least amount of interference.

Note

For the best reception:

An FM outdoor antenna is recommended. (→ page 6)

2 Connect the AM loop antenna.

Stand the antenna up on its base. Keep loose antenna cord away from other wires and cords.

3 Connect the speaker cables.

- Confirm the colours of the tags on the ends of the cords.
- For White tags:
Connect cords to grey terminals.
For Blue, Black and Red tags:
Connect cords so tag colours match the terminal colours.

Cords with white and blue tags are for high frequency.
Cords with red and black tags are for low frequency.

Incorrect connection can damage the unit.

Caution

Use only the supplied speakers.

The combination of the main unit and speakers provide the best sound. Using other speakers can damage the unit and sound quality will be negatively affected.

Caution

- Use the speakers only with the recommended system.
Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.
- Do not attach these speakers to walls or ceilings.

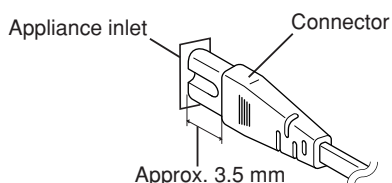
4 Connect the AC mains lead.

**FOR THE UNITED KINGDOM ONLY
READ THE CAUTION FOR THE AC MAINS LEAD ON
PAGE 3 BEFORE CONNECTION.**

Insertion of Connector

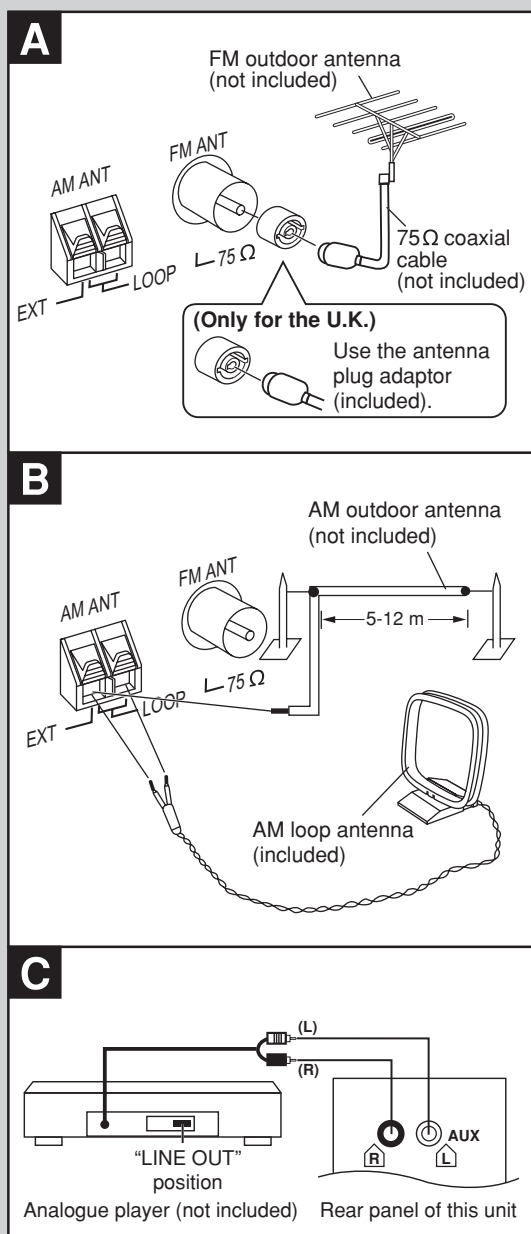
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.

However there is no problem using the unit.



Note

The included AC mains lead is for use with this unit only. Do not use it with other equipment.



Connections

Optional antenna connections

You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc.

A FM outdoor antenna

Disconnect the FM indoor antenna if an FM outdoor antenna is installed.

Note

An outdoor antenna should be installed by a qualified technician only.

B AM outdoor antenna

Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

Note

When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during a lightning storm.

External unit connections

- Make sure that the power supply for all components has been turned off before making any connections.
- For details, refer to the operating instructions of the unit which is to be connected.
- All peripheral components and cables sold separately.

C Connecting analogue equipment

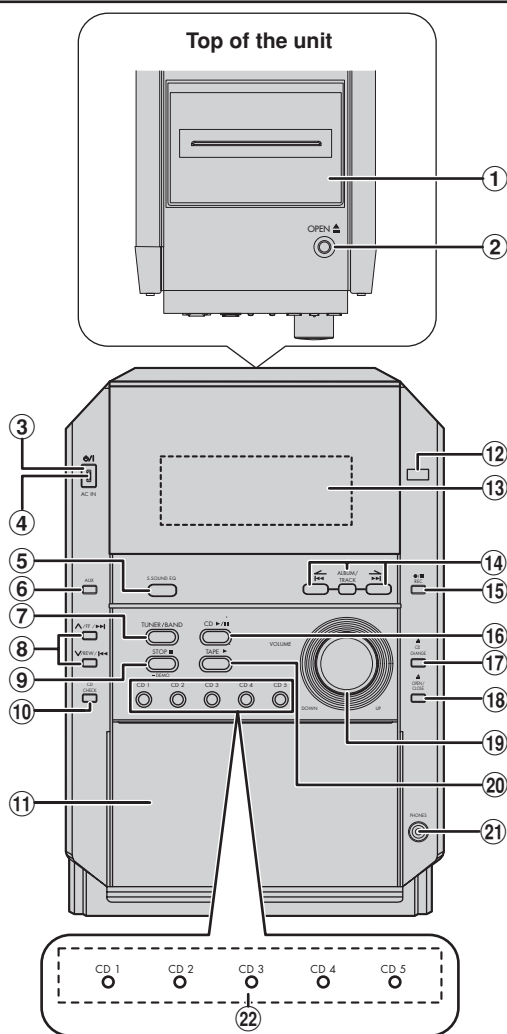
This example shows how to connect an analogue player with a PHONO OUT/LINE OUT switch.

When units other than those described are to be connected, please consult your audio dealer.

Note

- Only an analogue player with a built-in phono equalizer can be connected.
- Set the switch to the "LINE OUT" position at the back of the analogue player.

Top of the unit



Front panel controls

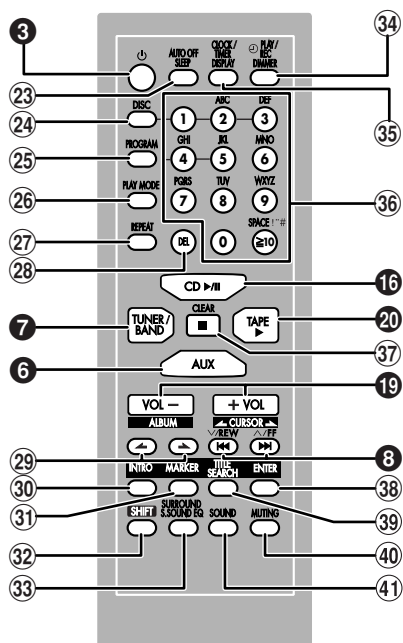
Main unit

- ① **Cassette lid**
- ② **Cassette open button (OPEN ▲)** 20
- ③ **Standby/on switch (⏻/⏻)** 8
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ④ **AC supply indicator (AC IN)**
This indicator lights when the unit is connected to the AC mains supply.
- ⑤ **Super sound EQ button (S.SOUND EQ)** 25
- ⑥ **Aux button (AUX)** 25
- ⑦ **Tuner/band select button (TUNER/BAND)** 9
- ⑧ **CD skip/search, tape fast-forward/rewind/TPS, tune/preset channel select, time adjust buttons (V/REW/◀◀, ▲/FF/▶▶)** 9, 11, 20, 23
- ⑨ **Stop and demonstration button (STOP ■, -DEMO)** 8, 11
- ⑩ **Checking CD position (CD CHECK)** 12
- ⑪ **CD trays**
- ⑫ **Remote control sensor**
- ⑬ **Display**
- ⑭ **Album/track selection button (◀ ALBUM/TRACK ▶)** 16
- ⑮ **Recording start/pause button (●/II REC)** 21
- ⑯ **CD play/pause button (CD ▶/II)** 11
- ⑰ **CD change button (▲ CD CHANGE)** 12
- ⑱ **CD tray open/close button (▲ OPEN/CLOSE)** 11
- ⑲ **Volume control (VOLUME DOWN, UP)** 9
- ⑳ **Tape play button (TAPE ▶)** 20
- ㉑ **Headphone jack (PHONES)** 25
- ㉒ **CD selection (CD 1~CD 5)** 12

Remote Control

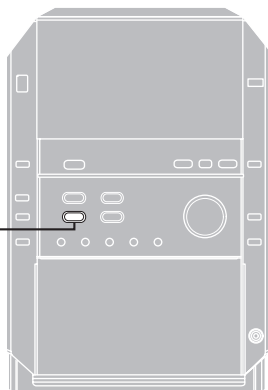
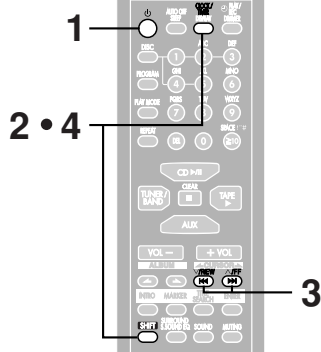
Buttons such as ③ function in exactly same way as the buttons on the main unit.

- ㉓ **Auto off/Sleep timer button (AUTO OFF, SLEEP)** 22, 24
- ㉔ **Disc button (DISC)** 13
- ㉕ **CD Program, tuner preset button (PROGRAM)** 10, 15
- ㉖ **Play mode select button (PLAY MODE)** 9, 13
Use this for selecting CD play mode, tune mode and FM mode.
- ㉗ **Repeat button (REPEAT)** 14
- ㉘ **Delete button (DEL)** 18
- ㉙ **Album selection button (ALBUM, ▲ ▲)** 16
- ㉚ **Intro button (INTRO)** 17
- ㉛ **Marker memory/recall button (MARKER)** 19
- ㉜ **Shift button (SHIFT)**
To use functions labelled in orange ※ :
While pressing [SHIFT], press the corresponding button.
- ※ For buttons [AUTO OFF], [CLOCK/TIMER], [⓪PLAY/REC] and [SURROUND].
- ㉝ **Surround, Super sound EQ button (SURROUND, S.SOUND EQ)** 25
- ㉞ **Play timer/record timer/Dimmer button (⓪PLAY/REC, DIMMER)** 8, 23
- ㉟ **Clock/timer/CD display/RDS display button (CLOCK/TIMER, DISPLAY)** 8, 9, 14
- ㊱ **Numbered, character buttons (≥10, 1-9, 0, A-Z, SPACE!™#)** 10, 18
- ㊲ **Stop/clear button (■ CLEAR)** 15
- ㊳ **Enter button (ENTER)** 18
- ㊴ **Title search mode select button (TITLE SEARCH)** 18
- ㊵ **Muting button (MUTING)** 8
- ㊶ **Preset EQ/Manual EQ button (SOUND)** 25



A

STOP ■, -DEMO

**B**

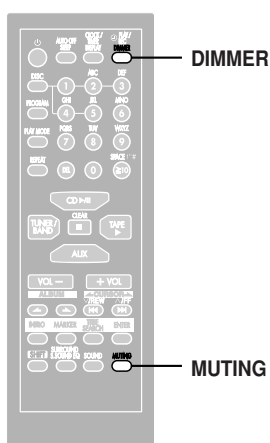
CLOCK



18:30



18:30

C**A Demo function**

When the unit is first plugged in, a demonstration of its functions may be shown on the display. If the demo setting is off, you can show a demonstration by selecting "DEMO ON".

Press and hold [STOP ■, -DEMO].

The display changes each time the button is held down.

→ DEMO OFF → DEMO ON

While in the standby mode, select "DEMO OFF" to reduce power consumption.

B Setting the time

This is a 24-hour clock.

The example shows how to set the clock for 18:30.

1 Press [⏻] to turn the unit on.**2 Press [SHIFT] + [CLOCK/TIMER] to display "CLOCK".**

Every time you press the button:

→ CLOCK → ⏻ PLAY → ⏻ REC
Original display ←

3 Within 5 seconds

Press and hold [V-/REW/⏮] or [^/FF/⏭] to set the time.

4 Press [SHIFT] + [CLOCK/TIMER].**Displaying the clock:**

Press [SHIFT] + [CLOCK/TIMER].

The clock is shown for about 5 seconds.

Note

The clock may lose or gain some time over a period. Readjust if necessary.

C Convenient functions**To dim the display panel****Press [DIMMER].**

The display brightness will be reduced except for [AC IN] indicator.

To cancel, press [DIMMER] again.

To mute the volume**Press [MUTING].**

To cancel, press [MUTING] again.

Muting can also be cancelled by lowering the volume all the way to "--dB".

When the system is turned off, the muting operation will be automatically cancelled.

The radio: manual tuning

1 Press [TUNER/BAND] to select:

→ FM → AM →

2 Press [PLAY MODE] to select “MANUAL”.

→ PRESET → MANUAL →

3 Press [V/REW/◀◀] or [^/FF/▶▶] to select the frequency of the required station.

“ST” is displayed when a stereo FM broadcast is being received.

4 Adjust the volume.

Auto tuning

Press and hold [V/REW/◀◀] or [^/FF/▶▶] for a moment. The unit begins auto tuning when the frequency starts changing rapidly and stopping when it finds a station.

- To cancel, press [V/REW/◀◀] or [^/FF/▶▶] again.
- Excessive interference may interrupt auto tuning.

A To improve FM sound quality

Press and hold [PLAY MODE] to display “MONO”.

To cancel, press and hold [PLAY MODE] again.

MONO is also cancelled if the frequency is changed.

For normal listening, turn off “MONO”.

B RDS broadcasting (For Europe)

This unit can display the text data transmitted by the radio data system (RDS) available in some areas.

If the station you are listening to is transmitting RDS signals, “RDS” will light up on the display.

Displaying the name of a broadcasting station or a program type

Press [DISPLAY].

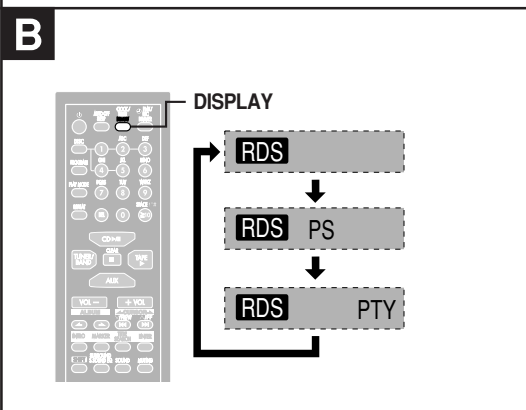
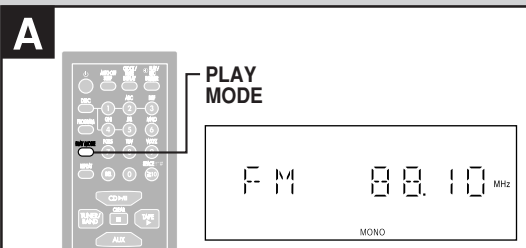
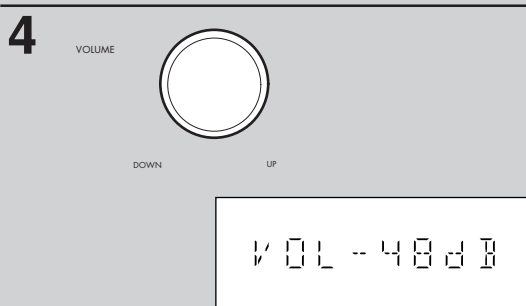
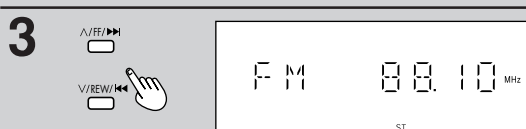
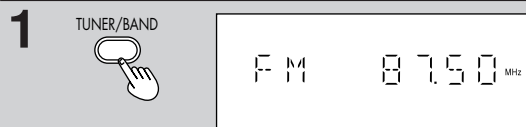
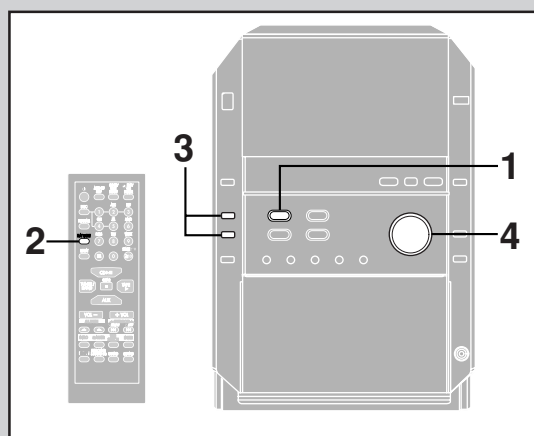
Every time you press the button:

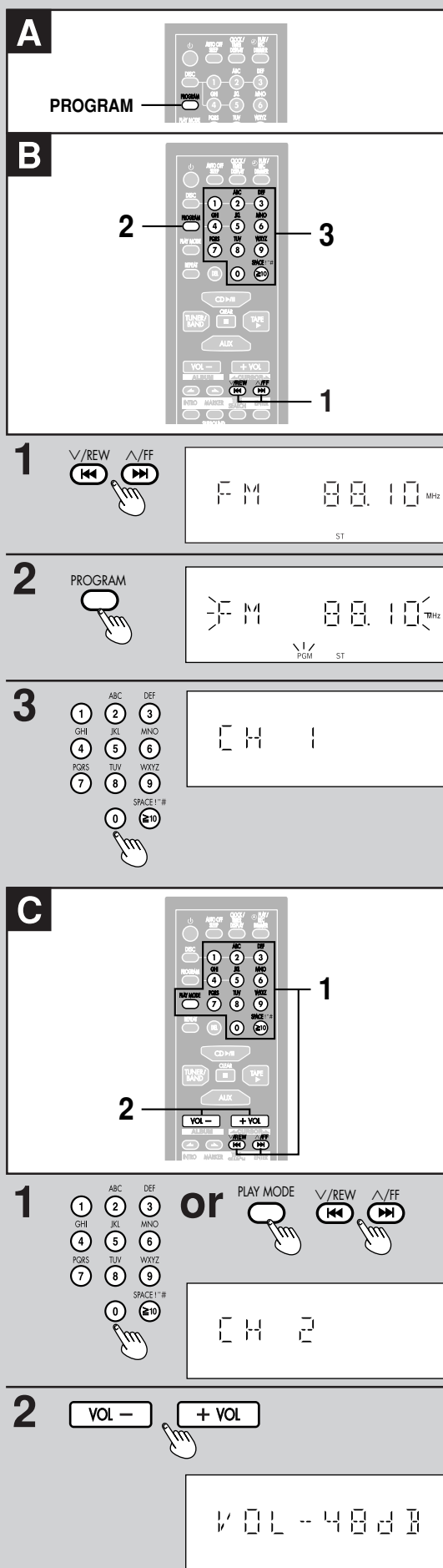
Frequency display → Station Name (PS) → Program type (PTY)

Program type displays			
NEWS	VARIED	FINANCE	COUNTRY
AFFAIRS	POP M	CHILDREN	NATIONAL
INFO	ROCK M	SOCIAL A	OLDIES
SPORT	M.O.R M*	RELIGION	FOLK M
EDUCATE	LIGHT M	PHONE IN	DOCUMENT
DRAMA	CLASSICS	TRAVEL	TEST
CULTURE	OTHER M	LEISURE	ALARM
SCIENCE	WEATHER	JAZZ	

Notes

- RDS displays may not be available if reception is poor.
- “M.O.R M”=“Middle of the road music”
- Sound is momentarily interrupted if you load/unload tapes while listening to an AM broadcast.





The radio: preset tuning

There are two methods of pre-setting stations:

Automatic presetting: Stations the tuner can receive are preset automatically.

Manual presetting: You can select the stations to preset and the order they are preset in.

Up to 15 stations can be preset for FM and AM bands. Press [TUNER/BAND] to select "FM" or "AM".

A Automatic presetting

Auto presetting for AM and FM each.

1 Tune to the frequency where presetting is to begin (→ page 9).

2 Press and hold [PROGRAM].

Auto presetting starts and the last station memorized is tuned in.

B Manual presetting

Preset the stations one at a time.

1 Press [V/REW/◀◀] or [Λ/FF/▶▶] to tune to the required station.

2 Press [PROGRAM].

3 Press numeric buttons to select a channel.

The station occupying a channel is erased if another station is preset in that channel.

C Selecting channels

1 Press numeric buttons to select the channel.

For channels 10 to 15 press [≥10], then the two digits.

OR

① Press [PLAY MODE] to select "PRESET".

② Press [V/REW/◀◀] or [Λ/FF/▶▶] to select the channel.

2 Adjust the volume.

AM allocation setting

By main unit only

Each country allocates broadcast bands according to their particular needs.

This system can also receive AM broadcasts allocated in 10 kHz steps.

To change the step (9kHz ↔ 10kHz)

Preparation:

① Press [TUNER/BAND] to select "FM".

② Press and hold [TUNER/BAND].

After a few seconds the display changes to a flashing display of the current minimum frequency.

③ Continue to hold [TUNER/BAND] down.

When the minimum frequency changes, release the button.

To return to the original step, repeat the above steps.

Note

After changing the "allocation" setting, the frequencies you previously preset in the memory will be cleared.

CDs

This unit can play CD-DA (digital audio) format audio CD-R and CD-RW that have been finalized (a process performed after recording that enables this unit to play audio CD-R and CD-RW).

It may not be able to play some CD-R or CD-RW due to the condition of the recording.

The unit contains five CD trays.

You can simply listen to the CD on a single tray, or you can select and listen to the CD in a particular tray. See the section on All-Disc play (→ page 13) for information on how to listen to all the CDs one after another.

Listening to CD on a single tray

- 1 Press [▲ OPEN/CLOSE] to insert the CD on the disc tray. Press again to close.
- 2 Press [CD ►/II] to start play from the first track. The player stops after playing the last track.
- 3 Adjust the volume.

To	Action
stop the disc	Press [STOP ■, -DEMO].
pause play	Press [CD ►/II]. Press again to resume play.
skip tracks	Press [V/REW/◀◀] or [V/FF/▶▶].
search through tracks	Press and hold [V/REW/◀◀] or [V/FF/▶▶] during play or pause.
view CD indicator	The CD indicator on the display lights whenever the tray is in the playing position.
start one touch play	If the unit is in standby mode and a CD is loaded, press [CD ►/II] or [CD 1] ~ [CD 5]. The unit will come on automatically and play will start.

A CD selection and care

Only play CDs with COMPACT disc DIGITAL AUDIO trademark. (see (a))

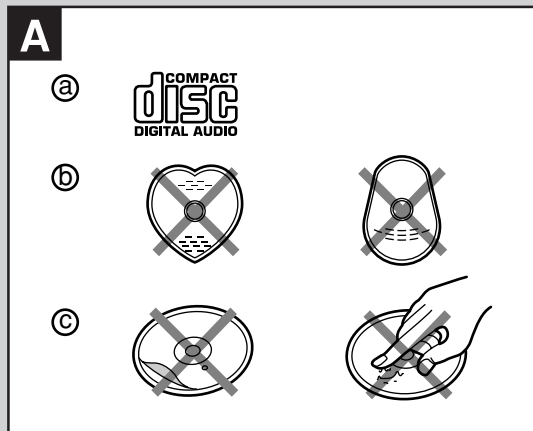
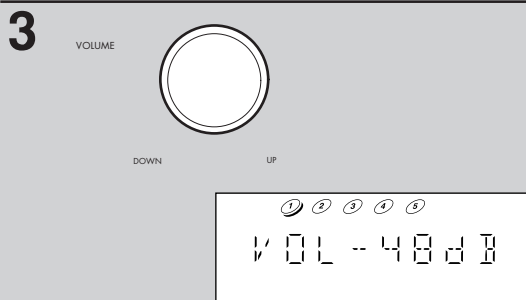
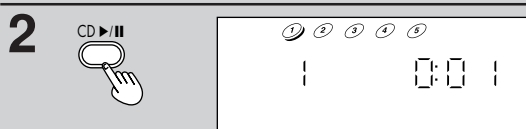
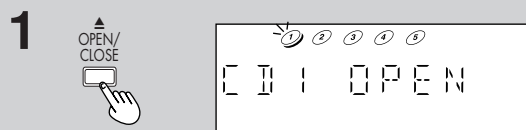
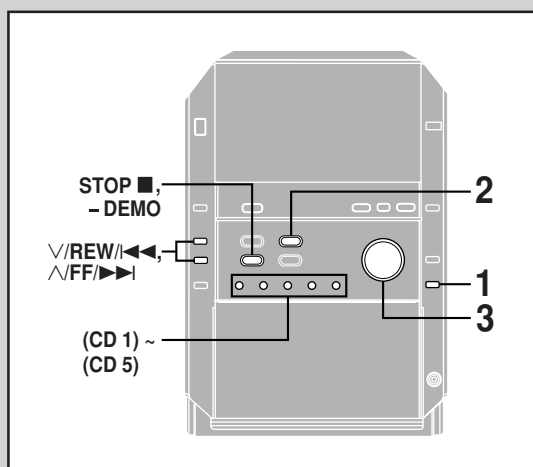
Do not;

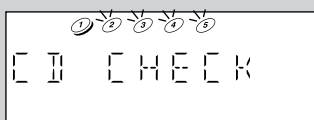
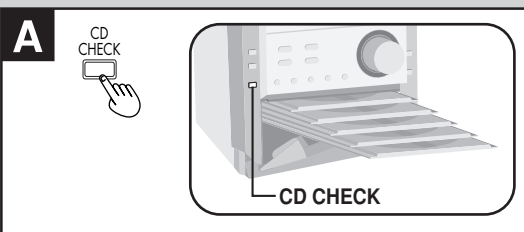
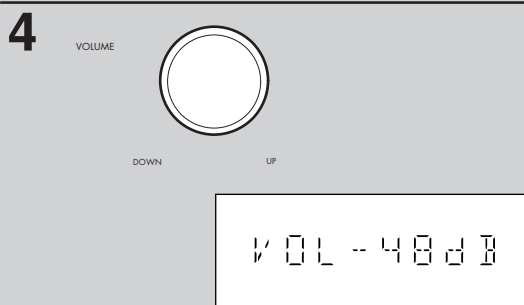
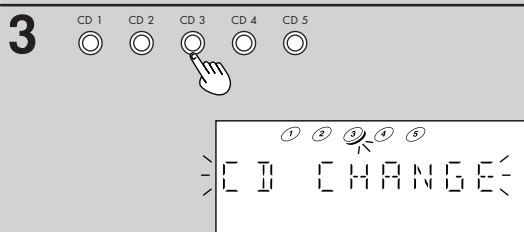
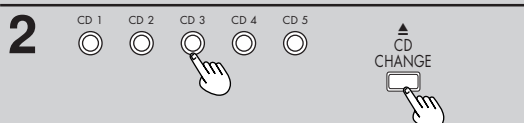
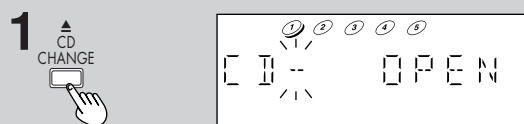
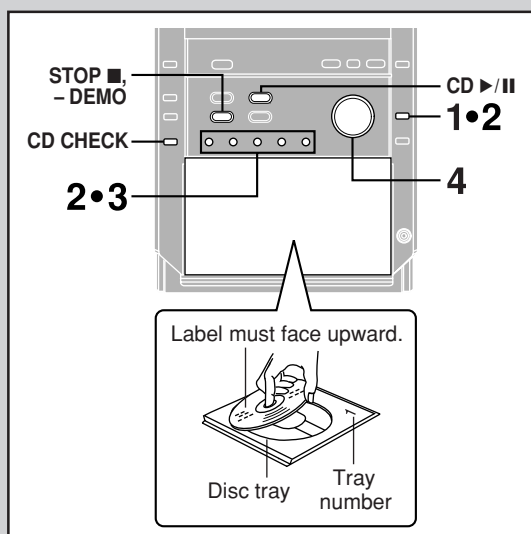
- Use irregularly shaped CDs. (b)
- Attach extra labels and stickers.
- Use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers. (c)
- Attach scratch-proof covers or any other kind of accessory.
- Write anything on the CD.
- Clean CDs with liquids. (Wipe with a soft, dry cloth.)
- Use CDs printed with label printer available on the market.

To prevent damage

Always observe the following points.

- Set the system on a flat, level surface.
Do not set it on top of magazines, inclined surfaces, etc.
- Do not move the system while tray is opening/closing, or when loaded. Always unload all CDs before moving the system.
- Do not put anything except a CD in the tray.
- Do not use cleaning CDs or CDs which are badly warped or cracked.
- Do not disconnect the power mains lead from the household mains socket during CD changing operation.





CDs

Listening to a CD placed in a specific tray

Preparation:

Press [CD ►/II] and then [STOP ■, -DEMO].

Placing a CD in your desired tray

- 1 Press [▲ CD CHANGE].
- 2 (Within about 10 seconds)
Press [CD 1] ~ [CD 5] and insert the CD on the tray.
Press [▲ CD CHANGE] again to close.
Repeat steps 1 and 2 to insert up to 5 CDs.

Listening to the CD placed in a specific tray

- 3 Press [CD 1] ~ [CD 5] to start play.
The player stops after playing the last track.
- 4 Adjust the volume.

To remove the CD

You can change the CDs in the other trays while one CD is playing (except in All-Disc Random play or program play).

- ① Press [▲ CD CHANGE].
- ② Press [CD 1] ~ [CD 5].

Press [▲ CD CHANGE] again to close the tray.

A To check which CDs are in the trays (CD CHECK)

Press [CD CHECK].

The tray with a CD being played will not open.
If the player is stopped, all trays will open.

Press [CD CHECK] again to close the trays.

- Do not remove or insert CDs during a CD check.
- Do not pull out the trays during a CD check.
- 8 cm CDs cannot be checked.

Marking a track

You can mark one track each on the 5 discs loaded so that you can start play from them later. (➔ page 19)

CDs

Listening to specific CDs and tracks (CD Play Mode function)

Mode	To play
1-DISC	one selected disc.
ALL-DISC	all loaded discs in succession from the selected disc to the final disc ※.
1-TRACK	one selected track on the selected disc.
1-RANDOM	one selected disc in random order.
A-RANDOM	all loaded discs in random order.

- 1 Press [CD ►/II] and then [■ CLEAR].
- 2 Press [PLAY MODE] to select your desired mode.
 → 1-DISC → ALL-DISC → 1-TRACK
 ← A-RANDOM ← 1-RANDOM ←
- 3 Press [DISC] and (within 10 seconds) press [1]-[5] to select the disc.
 The CD starts if 1-DISC, ALL-DISC or 1-RANDOM was selected in step 2.
- 4 • When 1-TRACK is selected in step 2
 Select the track with the numeric buttons to start play.
 To select track 10 or over, press [≥10] then the two digits.
 - When 1-RANDOM or A-RANDOM is selected in step 2
 Press [CD ►/II] to play CD.

When playback ends

The current play mode will be retained.

※ Final disc

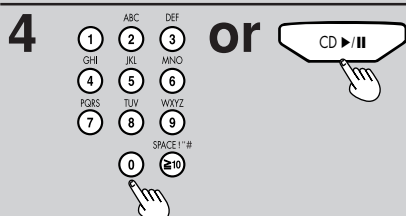
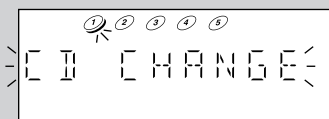
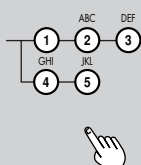
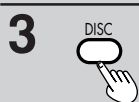
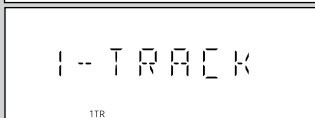
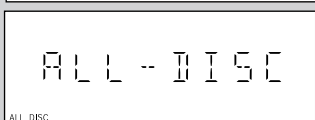
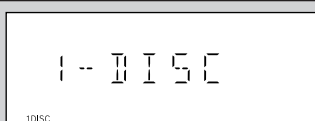
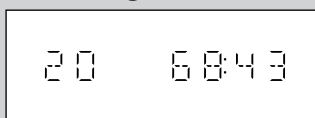
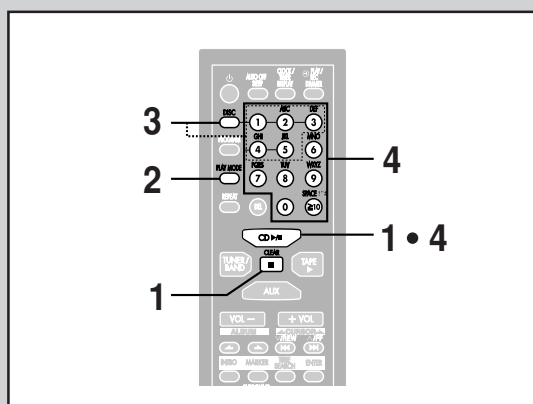
For example, if play starts from disc 4, disc 3 will be the "final disc".

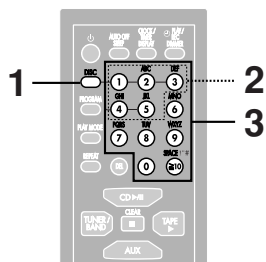
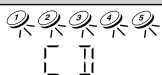
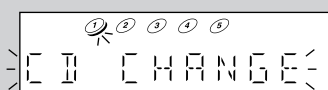
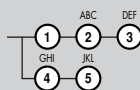
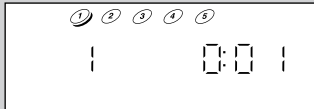
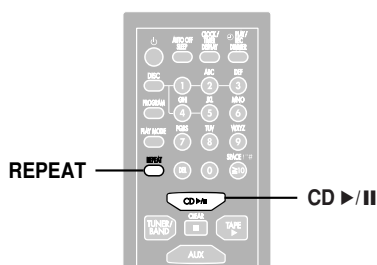
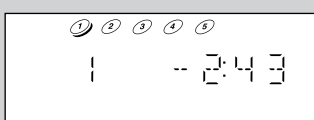
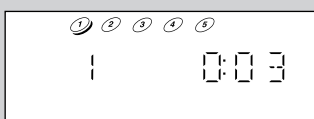
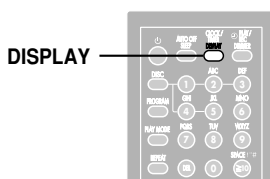
Order of progression:

Disc 4→5→1→2→3

Notes

- You can use the CD Play Mode function together with repeat play.
- During 1-RANDOM play or A-RANDOM play, you cannot skip to tracks which have already been played.
- During 1-RANDOM play or A-RANDOM play, you can search forward or backward only within the current track.



A**1****2****3****B****C****CDs****A Direct access play**

Direct access allows you to start normal play from a specific track to the last track on the CD.

1 Press [DISC].

2 (Within 10 seconds or so)

Press [1] ~ [5] to select the disc you want.

3 Press the numeric button(s) to select and play your desired track number.

To select a two-digit track

Press [≥10] and then the two numbers you want.

Note

You cannot use direct access play with 1-RANDOM or A-RANDOM mode.

B Repeat play

Press [REPEAT] before or during play.

"REPEAT ON" and "⏮" are displayed.

To cancel repeat play

Press [REPEAT] once again. "REPEAT OFF" is displayed and "⏮" is cleared.

To repeat your favorite tracks

1. Program the tracks you want (perform steps 1 ~ 6 on page 15.)

2. Press [REPEAT] and make sure "REPEAT ON" and "⏮" are displayed.

3. Press [CD ▶/II]. Playback will start.

To use repeat play with CD Play Mode function

Set the desired mode, press [REPEAT] before or during playback, and make sure "REPEAT ON" and "⏮" are displayed.

C CD display

This function allows you to display the remaining play time of the current track.

During play or pause mode

Press [DISPLAY] to display:

→ Elapsed play time → Remaining play time →

Note

When track number 25 or greater is playing, remaining play time display shows "--:--".

CDs

Program play

This function allows you to program up to 24 tracks.

- 1 Press [CD ►/II] and then [■ CLEAR].
- 2 Press [PROGRAM].
- 3 Press [DISC].
- 4 (within 10 seconds or so)
Press [1] – [5] to select the disc you want.
- 5 Press the numeric button(s) to select the desired track.
- 6 Repeat steps 3 through 5 to program other tracks.
- 7 Press [CD ►/II] to start play.

To	Action
cancel program play mode	Press [PROGRAM] in the stop mode. Programmed contents will be saved in memory.
clear the last track	Press [DEL] in the stop mode.
clear all programmed tracks	Press [■ CLEAR]. Within 5 seconds, press the button again to clear all tracks. "CLEAR ALL" is displayed.
select a two-digit track	Press [≥10] and then the two numbers you want.

When "CD FULL" appears

The number of programmed tracks is limited to 24 only.

You can do the following during program mode:

"PGM" appears on the display when play is stopped. Press [V/REW/◀◀] or [Λ/FF/▶▶] when "PGM" is displayed.

To check while programming, press [PROGRAM] twice after "PGM" appears, then press [V/REW/◀◀] or [Λ/FF/▶▶].

Add to the program.

Repeat steps 3 through 5 in the stop mode.

Memory retention

Your program is retained in memory for about 1 week while the system is unplugged.

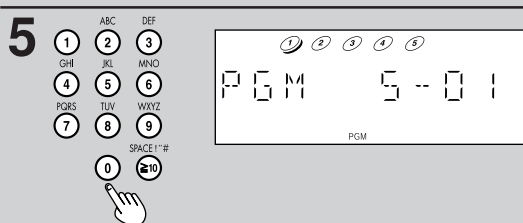
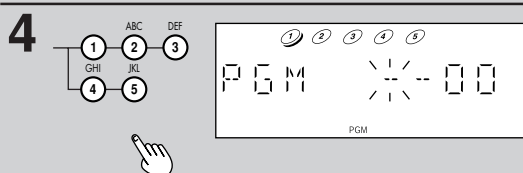
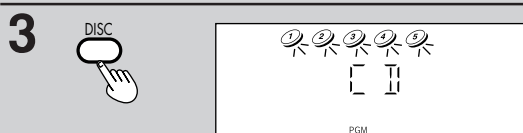
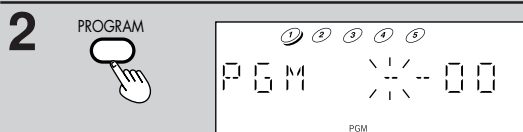
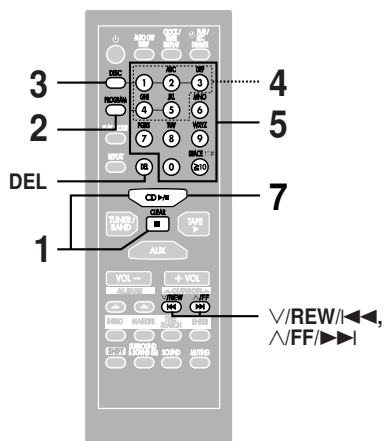
To replay your program

If you turned OFF your program with [PROGRAM], you can play it again as explained below.

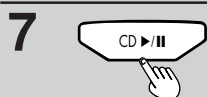
1. Press [PROGRAM].
2. Press [CD ►/II].

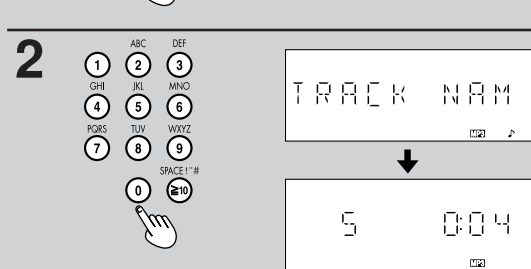
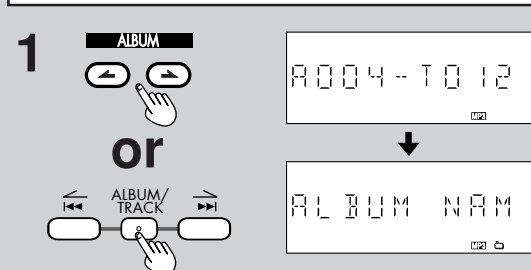
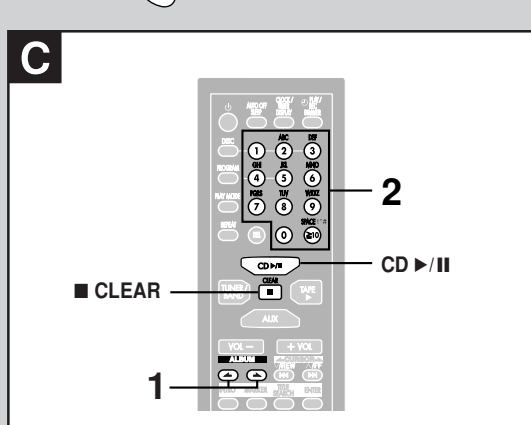
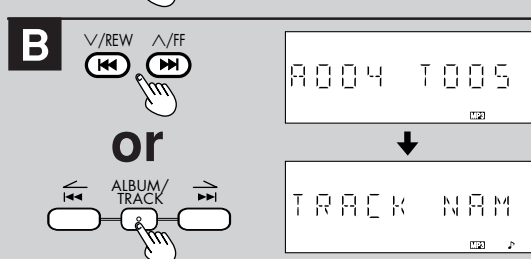
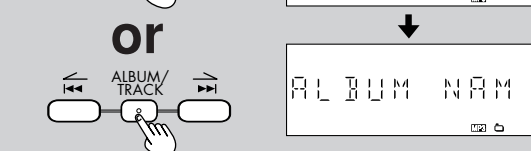
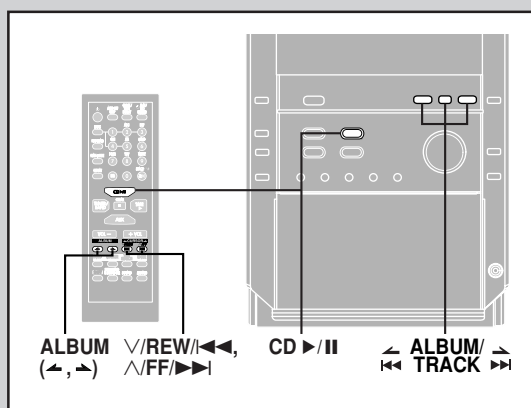
Notes

- During program play, you can search forward or backward only within the current track.
- During program play, skipping is always in the programmed order, whether forward or backward.
- You can use repeat mode with program play.
- You cannot program CD-DA together with MP3 tracks.



6 Repeat steps 3, 4, 5.





Enjoying MP3

This unit allows you to play MP3 files and access up to 999 tracks (files), 255 albums (folders) and 20 sessions.

When making MP3 files to play on this unit

Disc format

Discs must conform to ISO9660 level 1 or 2 (except for extended formats).

File format

- MP3 files must have the extension ".MP3" or ".mp3".

To play in a certain order

Prefix the folder and file names with 3-digits numbers in the order you want to play them.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomsom multimedia.

Limitations on MP3 play

- This unit is not compatible with packet-write format.
- You cannot use 1-Disc Random play, All-Disc Random play and search function.
- Some MP3 may not be played due to the condition of the disc or recording.
- Recordings will not necessarily be played in the order you recorded them.

Display when in the stop mode

"MP3" : Indicates the disc contains MP3 files

A Album skip play

During play or stop

Press [ALBUM (← or →)] to select the desired album.

You can also press the center button of [ALBUM/TRACK (← or →)], followed by [← or →] on the main unit to select an album.

When selecting in the stop mode:

Press [CD ►/II] to start play.

B Track skip play

During play or stop

Press [V/REW/←] or [^/FF/→] to select a desired track.

You can also press the center button of [ALBUM/TRACK (← or →)], followed by [← or →] on the main unit to select a track.

When selecting in the stop mode:

Press [CD ►/II] to start play.

Note

During 1-ALBUM mode, track skipping can only be done within the current album.

C Starting play from a desired track in a desired album

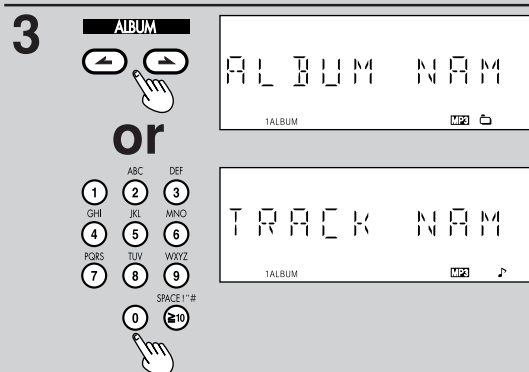
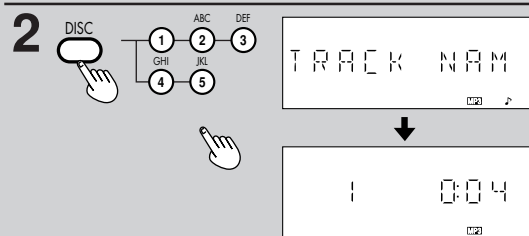
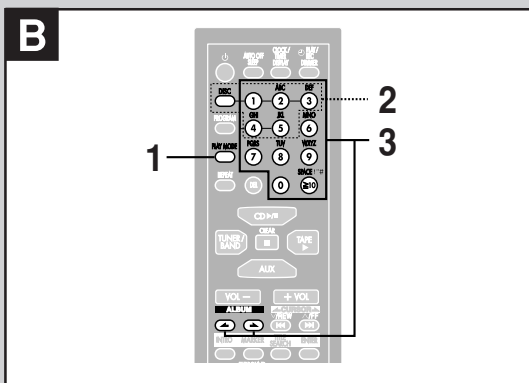
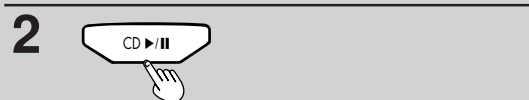
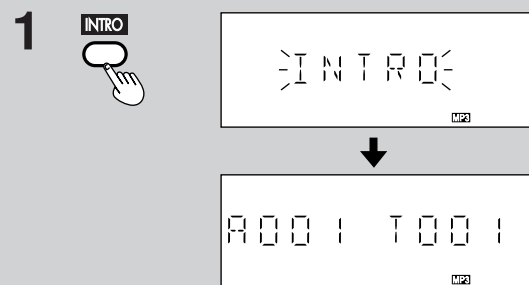
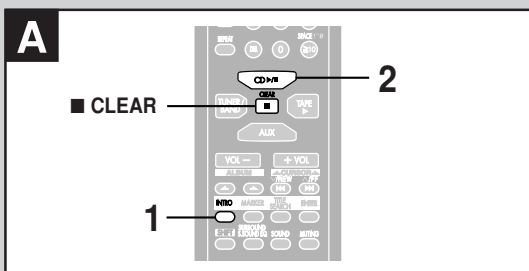
Preparation: Press [CD ►/II] and then [■ CLEAR].

1 Press [ALBUM (← or →)] to select the album.

You can also press the center button of [ALBUM/TRACK (← or →)], followed by [← or →] on the main unit to select an album.

2 Press the numeric buttons to select your desired track in the current album.

For two digit numbers, press [≥10] once then the two digits. For three digit numbers, press [≥10] twice then the three digits.



Enjoying MP3

A INTRO function (Album scan)

Listen to the first track of all albums in the current disc for 10 seconds each to find your desired album.

Preparation: Press [CD > II] and then [■ CLEAR].

- 1 Press [INTRO] to start INTRO function.
(INTRO function is cancelled after playing the first track in the last album on the current disc.)
- 2 While your desired album is playing, press [CD > II].
Play starts from the first track of the album.

To stop during the process, press [INTRO] or [■ CLEAR].

B CD Play Mode function for MP3

Mode	To
1-DISC	play one selected disc.
ALL-DISC	play all loaded discs in succession from the selected disc to the final disc *.
1-TRACK	play one selected track on the selected disc.
1-ALBUM	play one selected album on the selected disc.

- 1 Press [PLAY MODE] to select:
→ 1-DISC → ALL-DISC → 1-TRACK
→ 1-ALBUM ←
- 2 Press [DISC] and (within 10 seconds) [1]-[5] to select and start the disc.
- 3 • When you have selected 1-ALBUM in step 1. Press [ALBUM (← or →)] to select and start the album.
• When you have selected 1-TRACK in step 1, press the numeric buttons to select and play will start.
For two digit numbers, press [≥10] once then the two digits.
For three digit numbers, press [≥10] twice then the three digits.

When playback ends

The current play mode will be retained.

When "NOT MP3/ERROR1" appears on the display

An unsupported MP3 format is being played. The unit will skip that track and play the next one.

* Final disc

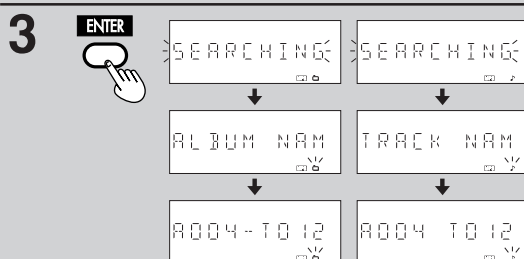
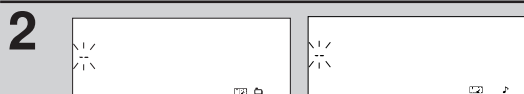
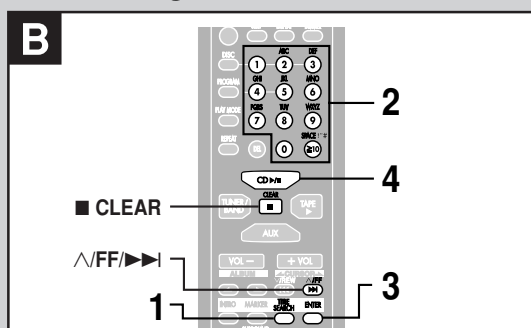
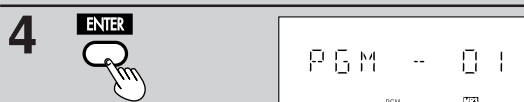
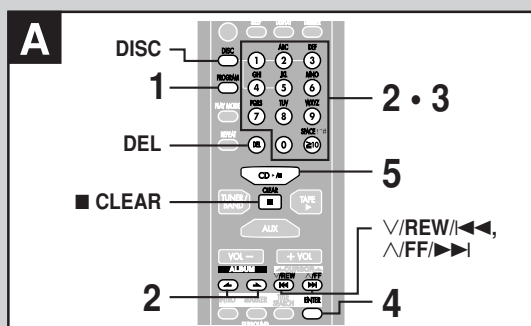
For example, if play starts from disc 4, disc 3 will be the "final disc".

Order of progression:

Disc 4→5→1→2→3

Notes

- You can use repeat mode (→ page 14) with CD Play Mode function.
- You cannot use program mode together with CD Play Mode function.



Enjoying MP3

A Program play for MP3

You can program up to 24 tracks.

Preparation:

1. Press [DISC] and (within 10 seconds) [1]–[5] to select the disc.
2. Press [■ CLEAR].

1 Press [PROGRAM].

"PGM" appears.

2 Press [ALBUM (◀ or ▶)] to select the album. To select an album directly, press the numeric buttons after pressing [ALBUM (◀ or ▶)].

For two digit numbers, press [≥10] once then the two digits.

For three digit numbers, press [≥10] twice then the three digits.

3 Press [V/REW/◀◀] or [^/FF/▶▶] to select the track. To select a track directly, press the numeric buttons after pressing [V/REW/◀◀] or [^/FF/▶▶].

4 Press [ENTER].

Repeat steps 2 to 4 to program other tracks.

5 Press [CD ►/II] to start play.

Play will start according to programmed sequence until the end.

To exit program mode.

Press [PROGRAM] in the stop mode. (You can replay your program by pressing [PROGRAM] then [CD ►/II].) You can do the following while "PGM" is displayed.

To	Action
check program contents	Press [V/REW/◀◀] or [^/FF/▶▶] when "PGM" is displayed. To check while programming, press [PROGRAM] twice after "PGM" appears, then press [V/REW/◀◀] or [^/FF/▶▶].
add to the program	Repeat steps 2~4.
clear the last track	Press [DEL] in the stop mode.
clear all programmed tracks	Press [■ CLEAR]. Within 5 seconds, press the button again to clear all tracks. "CLEAR ALL" is displayed.

Notes

- You can use repeat mode (⇒ page 14) with program play.
- You cannot program more than one CD for MP3.
- You cannot program CD-DA together with MP3 tracks.
- The program memory is cleared when you change a disc or open the CD tray.

B Album/Track title search

Preparation: Press [CD ►/II] and then [■ CLEAR].

1 For album title search, press [TITLE SEARCH] once.

For track title search, press [TITLE SEARCH] twice.

2 Enter the album/track title keyword. (⇒ page 19)

3 Press [ENTER].

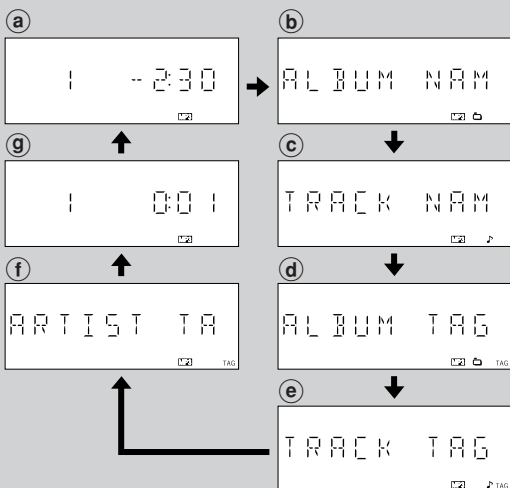
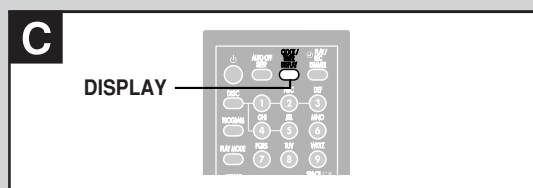
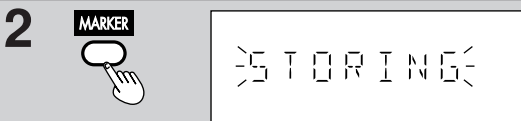
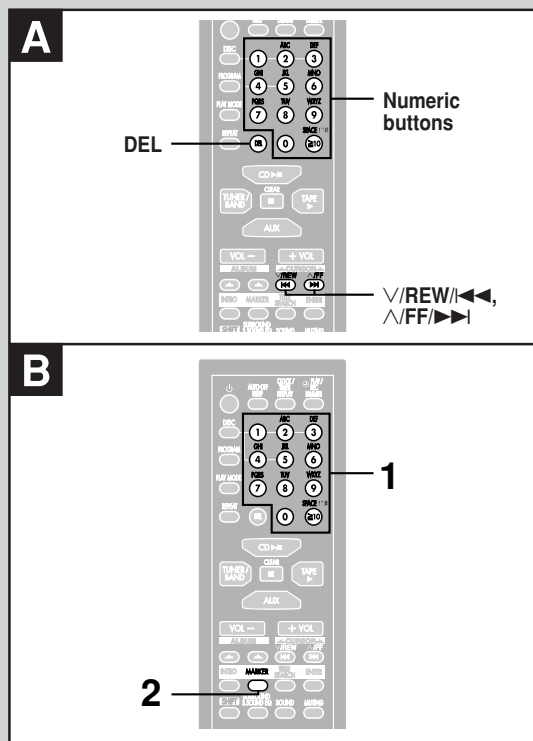
Press [^/FF/▶▶] to display the next title search result. "NOT FOUND" is displayed when there is no match.

4 Press [CD ►/II] to start play from the album/track found.

Title search mode is cancelled.

To cancel partway through

Press [■ CLEAR].



Enjoying MP3

A Entering characters

You can enter up to 9 characters for album/track title search.

- ① Press the numeric buttons to select the required character.

Numbered buttons	Characters	Numbered buttons	Characters
1	1	6	MNO6
2	A B C 2	7	P Q R S 7
3	D E F 3	8	T U V 8
4	G H I 4	9	W X Y Z 9
5	J K L 5	0	0
≥10	space ! " # \$ % & ' () * + , - . : ; = ? _		

- ② Press [V/FF/▶▶] to enter character.

Editing keywords

Press [V/REW/◀◀] or [V/FF/▶▶] to revise any characters.
To delete, move the cursor over the character and press [DEL].

B Marking a track

You can mark one track each on the discs loaded so that you can start play from them later.

To mark a track number

- 1 During play or stop

For MP3, refer to "Track skip play" on page 16.

For CD-DA, press the numbered buttons.

Select your desired track with the numeric buttons.

For two digit numbers, press [≥10] once then the two digits.

For three digit numbers, press [≥10] twice then the three digits.

- 2 Hold down [MARKER] until "STORING" blinks on the display.

If you store a new track, the old track will be cleared.

To recall a marked track number in the current disc

During play or stop

Press [MARKER] to recall a marker and start play.

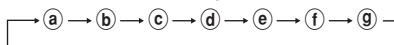
Notes

- "NO MARKER" indicates that the marker in the current disc is empty.
- The marker memory will be cleared when you open the CD tray.
- For CD-DA, you cannot use this function during 1-Disc Random play and All-Disc Random play.
- You cannot use this function during program mode.

C Display for MP3

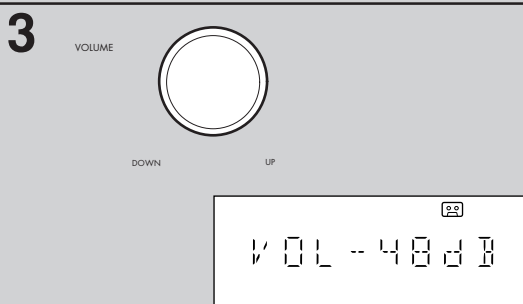
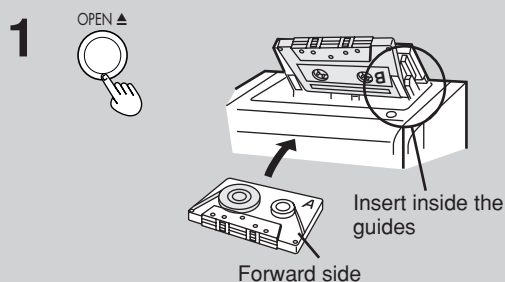
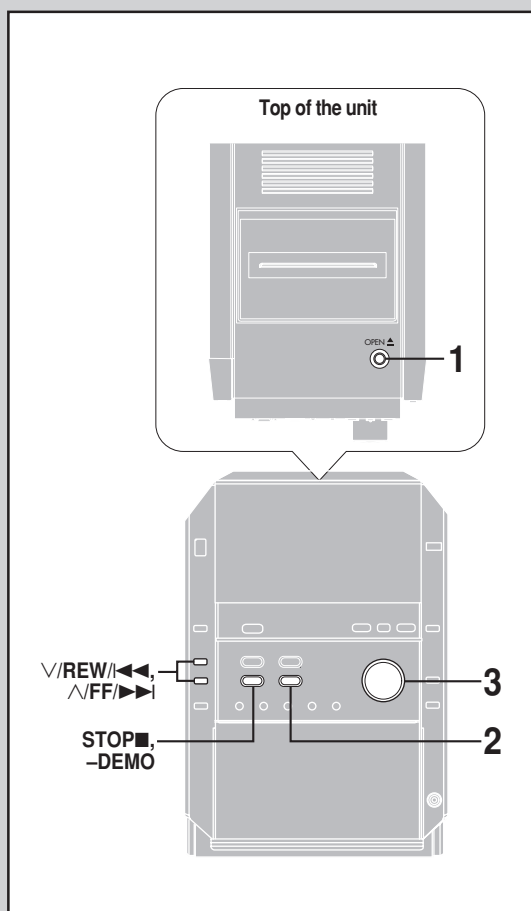
During play or pause

Press [DISPLAY] to select your desired CD display.



Notes

- When a title is longer than 9 characters, it will scroll across the display.
- "NO ID3" is displayed if titles with ID3 tags haven't been entered.
- Maximum number of displayable characters:
Album/track title: 31
ID3 album/title/artist name: 30
(ID3 is a tag embedded in MP3 track to provide information about the track.)
- This unit can display album and track titles with ID3 tags (version 1.0 and 1.1). Titles containing text data that the unit doesn't support cannot be displayed.



Cassette tapes

1 Press [OPEN ▲] to insert a cassette.

Close the lid by hand.

2 Press [TAPE ►] to start playback.

Repeat step 1 and 2 to play the other side of the tape.

3 Adjust the volume.

To	Action
stop tape playback	Press [STOP ■, – DEMO].
start one touch play	Press [TAPE ►] when the system is OFF with the cassette loaded.
fast-forward and rewind	Press [V/REW/◀◀] or [◀/FF/▶▶] in the stop mode.

Cassette tape selection and care

Types of cassettes which can be played correctly

Use normal position tapes.

High position and metal position tapes can be played, but the unit will not be able to do full justice to the characteristics of these cassettes.

- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Tape slack can get caught up in the mechanism and should be wound up before the tape is played.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly.

To find the beginning of a program (TPS: Tape Program Sensor)

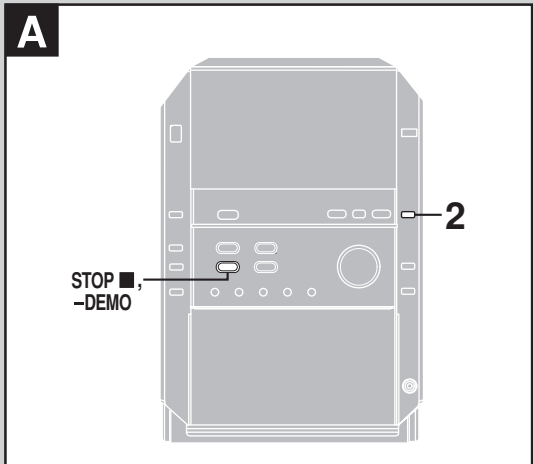
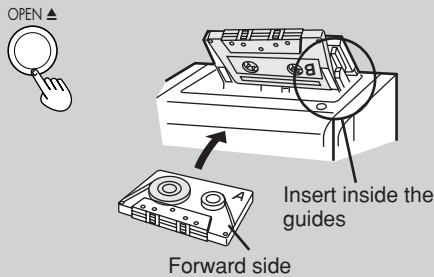
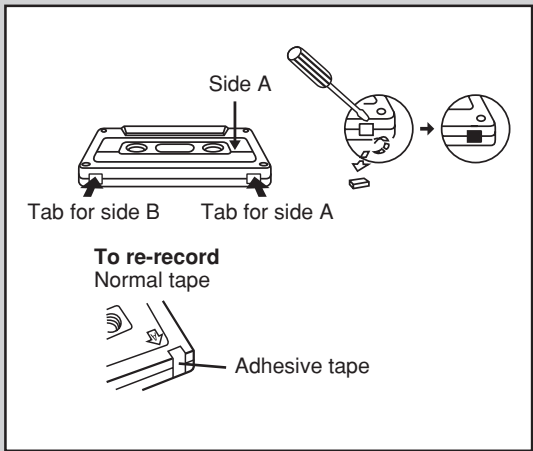
TPS finds the beginning of a track and resumes play from there. Each press increases the number of tracks skipped, up to a maximum of 9.

Press [V/REW/◀◀] or [◀/FF/▶▶] during play.

Note

The TPS function searches for silent parts of about 4 seconds in length which are normally found between tunes. As a result, it may not function properly in the following cases:

- With short silent parts
- When noise occurs between tunes
- With silent parts found within tunes



Before recording

- Only normal position tapes are recommended.
- Volume and sound quality during playback have no effect on recording.

Erasure prevention

The illustration shows how to remove the tabs to prevent recording. To record on the tape again, cover as shown.

To erase a recorded sound

- ① Press [TAPE ►] and then [STOP ■, -DEMO].
- ② Insert the recorded cassette with the tape facing out.
- ③ Press [●/|| REC].

Your attention is drawn to the fact that recording pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

Preparatory steps

Wind up the leader tape to begin recording immediately.

Preparation: Press [TAPE ►] and then [STOP ■, -DEMO] to select tape as the source.

Press [OPEN ▲], insert a cassette with the tape facing out.

Close the lid by hand.

A Recording the radio

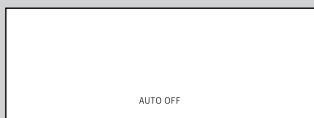
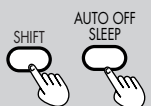
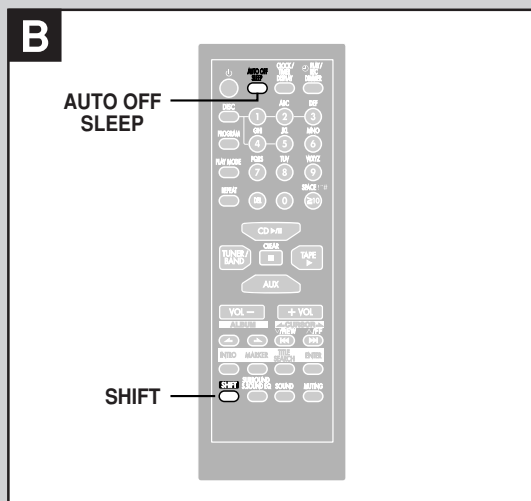
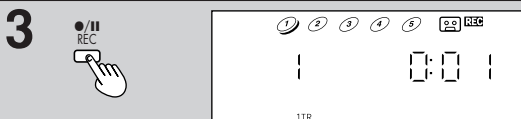
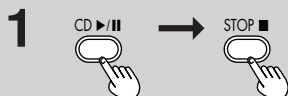
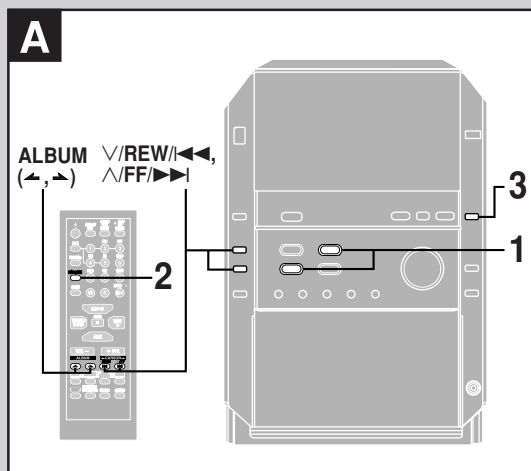
Preparation: Do the preparatory steps as above.

1 Tune to the required station.

(→ page 9)

2 Press [●/|| REC] to start recording.

To	Action
stop recording	Press [STOP ■, -DEMO].
stop recording temporarily	Press [●/ REC]. Press [●/ REC] again to resume recording.
cut an unnecessary part while recording	Press [●/ REC] during the unnecessary part. Press [●/ REC] again to resume recording.
record on the other side of the tape	Turn the tape over and press [●/ REC].



A Recording CDs

Mode	To
1-DISC	record one selected disc.
ALL-DISC	record all loaded discs in succession from the selected disc to the final disc.
1-TRACK	record one selected track on the selected disc.
1-ALBUM (MP3)	record one selected album on the disc.
1-RANDOM	record the disc in random order.
A-RANDOM	record all loaded discs in random order.

1 Press [CD ►/II] and then [STOP ■, -DEMO].

2 Press [PLAY MODE] to select your desired mode.

For 1-TRACK mode

Press [V/REW/◀◀] or [V/FF/▶▶] to select the track.

For 1-ALBUM mode (MP3)

Press [ALBUM (◀ or ▶)] to select the album.

For 1-DISC/1-RANDOM mode

Do steps 1 to 3 on page 13.

Ensure CD is stopped.

3 Press [●/II REC] to start recording.

To	Action
stop recording	Press [STOP ■, -DEMO].
stop recording temporarily	Press [●/II REC]. If the tape finishes before the CD, press [STOP ■, -DEMO] to stop the CD. Press [●/II REC] to resume recording.

To record programmed tracks

This function allows you to record up to 24 programmed tracks.

1 Program the track(s) you want.

(→ steps 1 - 6 on page 15)

2 Press [●/II REC] to start recording.

B Auto-off function

To save power, the unit turns off if it is left unused for 10 minutes. This function works only if CD or tape is selected as the source. This function does not work if the source is tuner or AUX.

Press [SHIFT] + [AUTO OFF].

"AUTO OFF" is shown on the display.

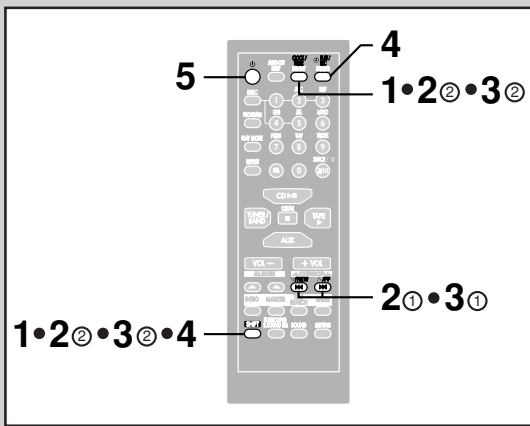
To cancel

Press [SHIFT] + [AUTO OFF] again to clear "AUTO OFF" from the display.

For your reference

The setting is maintained even if the unit is turned off. When the unit is turned on again, "AUTO OFF" is displayed and the unit functions as described above.

"AUTO OFF" disappears from the display if either tuner or AUX is selected as the source but continues to function normally.



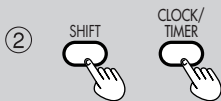
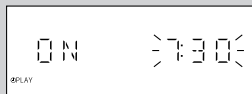
For Play Timer

For Record Timer



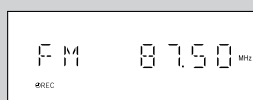
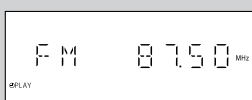
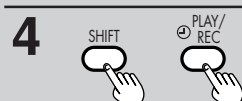
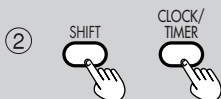
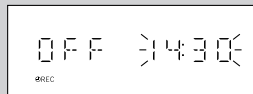
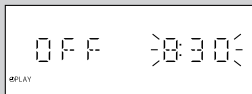
⊖PLAY ON

⊖REC ON



⊖PLAY OFF

⊖REC OFF



Using the timers

Using the play/record timer

The timer can be set as an alarm or radio recorder. Play timer and record timer cannot be used together.

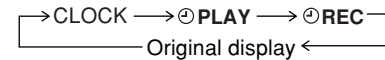
Preparations:

Turn the unit on and set the clock (⇒ page 8).

Timer	Action
Play timer	Prepare the music source you want to listen to; tape, CD, radio or aux, and set the volume.
Record timer	Check the cassette's erasure prevention tabs (⇒ page 21), insert the cassette and tune to the radio station (⇒ page 9) or select the aux source (⇒ page 25).

1 Press [SHIFT] + [CLOCK/TIMER] to select:

Every time you press the button:



Timer	To
CLOCK	set the clock.
⊖PLAY	set the play timer.
⊖REC	set the record timer.
Original display	resume original display.

Setting the start and finish times

(Within 3 seconds)

- 1 Press [V/REW/◀◀] or [A/FF/▶▶] to select the starting time.
- 2 Press [SHIFT] + [CLOCK/TIMER].
- 3 1 Press [V/REW/◀◀] or [A/FF/▶▶] to select the finishing time.
- 2 Press [SHIFT] + [CLOCK/TIMER].

Turning the timer on

4 Press [SHIFT] + [⊖PLAY/REC] to select:

Every time you press the button:

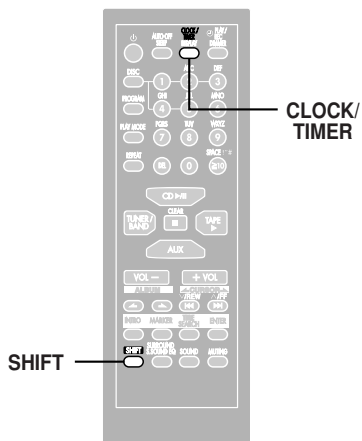
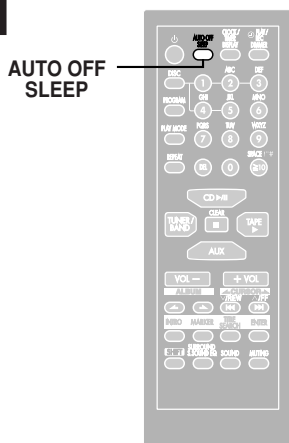


Timer	To
⊖PLAY	turn on the play timer.
⊖REC	turn on the record timer.
No display	turn off.

(The indicator doesn't appear if the start and finish times or the clock haven't been set.)

5 Press [⏻] to turn off the unit and timer will start.

Timer	Action
Play timer	Play will start in the set condition at the set time with volume increasing gradually to the set level.
Record timer	The unit comes on 30 seconds before the set time with the volume muted.

A**B**

Using the timers

To cancel the timer

Press [SHIFT] + [PLAY/REC].

To change the settings when the unit is on

To change	Action
play/record times	Repeat steps 1, 2, 3, and 5 on previous page.
source/volume	<ol style="list-style-type: none"> Press [SHIFT] + [PLAY/REC]. Make changes to the source or volume. Do steps 4 to 5 on previous page.

A Using the play/record timer

To check the settings when the unit is on

Press [SHIFT] + [CLOCK/TIMER] until "PLAY" or "REC" appears. Two seconds after "PLAY" or "REC" appears, the settings are displayed in the following order:

Timer	Setting display
Play timer	Play start time → Play finish time → Play source → Playback volume.
Record timer	Recording start time → Recording finish time → Recording source.

When the unit is off, press [SHIFT] + [CLOCK/TIMER] to check the settings until "PLAY" or "REC" appears.

To enjoy the desired source after the timer setting is completed.

The volume level (for play timer) and music source are stored in the timer memory and the timer will start in these preset conditions. However, the CD numbers do not get stored in the timer memory.

- After step 4 on the previous page, start playing the desired source.
- Reset the CD numbers if you have changed any of them, confirm that a CD or cassette is inserted, then press [⏮] to put the unit on standby.

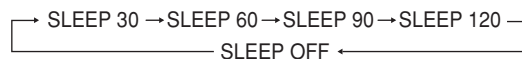
Notes

- If you turn the unit off and on again while a timer is functioning, the finish time setting will not be activated.
- If the unit is on, the timer will not function. The unit must be in the standby mode.
- If AUX is selected as the source, when the timer comes on, the system turns on and engages AUX as the source. If you want to playback or record from a connected unit, set the other unit's timer to the same time. (See the other unit's instruction manual.)

B Using the sleep timer

Using the sleep timer to turn off the unit automatically.

Press [SLEEP] to select:



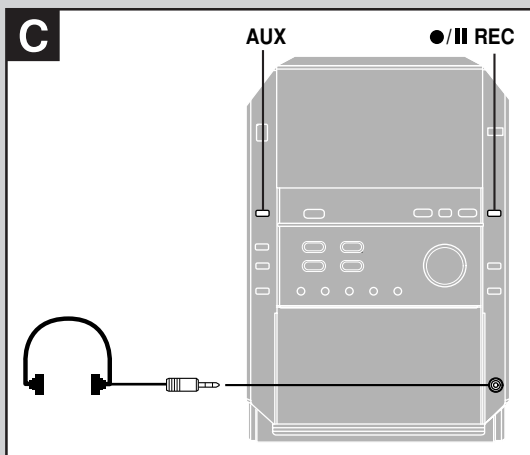
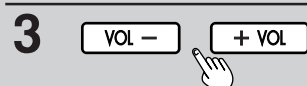
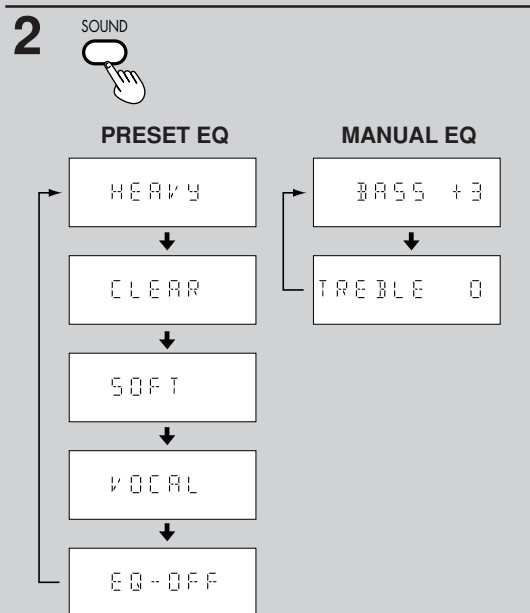
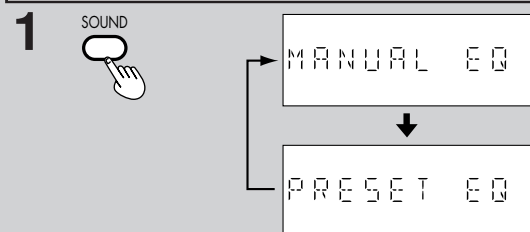
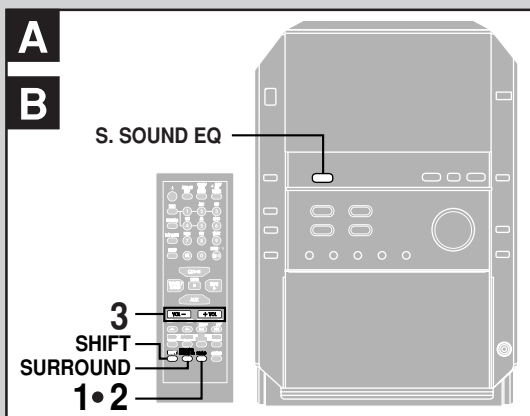
To cancel, Press [SLEEP] to select "SLEEP OFF".

To display the remaining time, press [SLEEP].

Press [SLEEP] again to change your desired time.

Notes

- The play and sleep timer or the record and sleep timer can be used together.
- The sleep timer always has priority. Be sure not to overlap timer settings.



A Using the sound quality settings

You can select sound quality with Preset EQ and improve bass and treble effect with Manual EQ.

Preset EQ

- Press and hold [SOUND] to select “PRESET EQ”.**
Each time you press and hold the button:

→ MANUAL EQ → PRESET EQ

- Press [SOUND] to select:**
Each time you press the button:

Setting Sound quality

HEAVY	Adds punch to rock
CLEAR	Clarifies higher frequencies
SOFT	For background music
VOCAL	Adds gloss to vocal
EQ-OFF	Cancelled

Manual EQ

- Press and hold [SOUND] to select “MANUAL EQ”.**
Each time you press and hold the button:

→ MANUAL EQ → PRESET EQ

- Press [SOUND] to select a setting.**
Each time you press the button:

→ BASS → TREBLE

Original Display ←

- Press [VOL -] or [+ VOL] to adjust the level.**
The tone level can be varied within a range of -3 to +3.

Notes

- Preset EQ cannot be used together with Super Sound EQ.
- Changes to sound quality do not affect recordings.

B Enhancing the sound quality

Press [S.SOUND EQ].

The button light is on.

Press the button again to cancel.

The button light goes out.

Using the “live” effect (SURROUND)

Press [SHIFT] + [SURROUND] to add natural width and depth to the stereo sound. “■■■■■” indicator will appear.

To cancel

Press [SHIFT] + [SURROUND] to clear the “■■■■■” indicator.

- When listening through headphones, the effect is less discernible than through the unit's speakers.
- If interference in FM stereo reception increases, cancel the surround sound effect.

C Using an external unit

- Press [AUX].
- For listening:** Proceed to step ③.
For recording: Press [●/II REC] (recording starts).
- Start playback from the external source. (For details, refer to the external unit's instruction manual.)

Listening with headphones

Reduce the volume level, and connect the headphones. Plug type: 3.5 mm stereo.

Note

Avoid listening for prolonged periods of time to prevent hearing damage.

Troubleshooting guide

Before requesting service, make the below checks. If you can't fix the system as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer.

Reference pages are shown as black circled numbers.

Common Problems

No sound.	Turn the volume up. The speaker cords may be shorted. Turn the unit off, check and correct the connections and turn the unit on. ⑤
Sound is unfixed, reversed or comes from one speaker only.	Check the speaker connections. ⑤
Humming heard during play.	An AC mains lead or fluorescent light is near the cables. Keep other appliances and leads away from this unit's cables. If possible in your area, turn the AC mains lead's plug or connector over to reverse the lead's polarity.
"ERROR" is displayed.	Incorrect operation performed. Read the instructions and try again.
"- -: -" appears on the display.	You plugged the AC mains lead in for the first time or there was a power failure recently. Set the time. ⑧
"F61" is displayed.	Check and correct the speaker cord connections. ⑤ If this does not fix the problem, there is a power supply problem. Consult the dealer.

Listening to the radio

Noise is heard. The stereo indicator flickers or doesn't light. Sound is distorted.	Use an outdoor antenna. ⑥
A beat sound is heard.	Turn the TV off or separate it from the unit.
A low hum is heard during AM broadcast.	Separate the antenna from other cables and cords.

When there is a television set nearby

The picture on the TV disappears or stripes appear on the screen.	The location and orientation of the antenna are incorrect. If you are using an indoor antenna, change to an outdoor antenna. ⑥ The TV antenna wire is too close to the unit. Separate the antenna wire of the TV set from the unit.
--	--

Using the cassette deck

Recording is not possible.	If the erasure prevention tabs have been removed, cover the holes with adhesive tape. ②①
-----------------------------------	--

Playing discs

The display is wrong or play won't start.	The disc may be upside down. ⑫ Wipe the disc. Replace the disc if it is scratched, warped, or non-standard. Condensation may have formed inside the unit due to a sudden change in temperature. Wait about an hour for it to clear and try again.
The total number of tracks displayed differs each time the same disc is inserted. Unusual sound is heard.	The disc may be scratched, or its data may be defective. Replace the disc.
CD-RW cannot be read.	The disc was incompletely formatted. Use the recording equipment to fully format the disc before recording.
"VBR—" is displayed instead of the remaining play time.	The unit cannot display the remaining play time for variable bit rate (VBR) tracks.
"TAKE OUT/DISC" appears on the display.	There is a problem with the disc mechanism. (A power failure may have occurred.) The tray will open automatically. Remove the disc from the tray, and after ensuring there is no disc in the tray, close it. The unit will make the disc changing noises for a few moments and then it should operate normally.

The remote control

Remote control doesn't work.	Check that the batteries are inserted correctly. ④ Replace the batteries if they are worn.
-------------------------------------	---

CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

CAUTION!

- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

SUOMI

VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VAROITUS!

- ÄLÄ ASENNATA TAI LAITA TÄTÄ LAITETTA KABINETTITYYPPISEEN KIRJAKAAPPIIN TAI MUUHUN SULJETTUUN TILAAN, JOTTA TUULETUS ONNISTUISI. VARMISTA, ETTÄ VERHO TAI MIKÄÄN MUU MATERIAALI EI HUONONNA TUULETUSTA, JOTTA VÄLTETTÄISIIN YLIKUUMENEMISESTA JOHTUVA SÄHKÖISKU- TAI TULIPALOVAARA.
- ÄLÄ PEITÄ LAITTEEN TUULETUSAUKKOJA SANOMALEHDELLÄ, PÖYTÄLIINALLA, VERHOLLA TAI MUULLA VASTAAVALLA ESINEELLÄ.
- ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.
- HÄVITÄ PARISTOT LUONTOA VAHINGOITTAMATTOMALLA TAVALLA.

VAROITUS:

TULIPALO-, SÄHKÖISKUVAARAN TAI TUOTETTA KOHTAAVAN MUUN VAHINGON VÄHENTÄMISEKSI EI LAITETTA SAA ALTISTAA SATEELLE, KOSTEUDELLE, VESIPISAROILLE TAI ROISKEELLE, EIKÄ NESTETTÄ SISÄLTÄVIÄ ESINEITÄ, KUTEN ESIMERKIKSI MALJAKOITA, SAA ASETTAA LAITTEEN PÄÄLLE.

NORSK

ADVARSEL!

DETTE PRODUKTET ANVENDER EN LASER. BETJENING AV KONTROLLER, JUSTERINGER ELLER ANDRE INNGREP ENN DE SOM ER BESKREVET I DENNE BRUKSANVISNING, KAN FØRE TIL FARLIG BESTRÅLING. DEKSLER MÅ IKKE ÅPNES, OG FORSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.

ADVARSEL!

- APPARATET MÅ IKKE Plasseres i en bokhylle, et innebygget kabinett eller et annet lukket sted hvor ventilasjonsforholdene er utilstrekkelige. Sørg for at gardiner eller lignende ikke forverrer ventilasjonsforholdene, så risiko for elektrisk sjokk eller brann forårsaket av overheting unngås.
- APPARATETS ventilasjonsåpninger må ikke dekket til med aviser, bordduker, gardiner og lignende.
- Plasser ikke åpen ild, slik som levende lys, oppå apparatet.
- Brukte batterier må kasseres uten fare for miljøet.

ADVARSEL:

FOR Å REDUSERE FAREN FOR BRANN, ELEKTRISK STØT ELLER SKADER PÅ PRODUKTET, MÅ DETTE APPARATET IKKE UTSETTES FOR REGN, FUKTIGHET, VANNDRÅPER ELLER VANNSPRUT. DET MÅ HELLER IKKE Plasseres gjenstander fylt med vann, slik som blomstervaser, oppå apparatet.

Specifications

AMPLIFIER SECTION

RMS Power output

10% Total harmonic distortion

1 kHz, both channels driven

(Low channel)

35 W per channel (6Ω)

8 kHz, both channels driven

(High channel)

35 W per channel (6Ω)

Total Bi-Amp power

70 W per channel

Output Impedance

Headphone

16Ω – 32Ω

FM TUNER SECTION

Frequency range

87.50 MHz – 108.00 MHz (50 kHz steps)

Sensitivity

1.5 μV (IHF)

S/N 26 dB

1.5 μV

Antenna terminal(s)

75Ω (unbalanced)

AM TUNER SECTION

Frequency range

522 kHz – 1629 kHz (9 kHz steps)

520 kHz – 1630 kHz (10 kHz steps)

Sensitivity

S/N 20 dB (at 999 kHz)

560 μV/m

CASSETTE DECK SECTION

Track system

4 track, 2 channel

Heads

Record/playback

Solid permalloy head

Erasure

Double gap ferrite head

Motor

DC servo motor

Recording system

AC bias 100 kHz

Erasing system

AC erase 100 kHz

Tape speed

4.8 cm/s

Overall frequency response

(+3 dB, –6 dB at DECK OUT)

NORMAL (TYPE I)

35 Hz – 14 kHz

S/N RATIO

45dB (A weighted)

Wow and flutter

0.10% (WRMS)

Fast forward and rewind time

Approx. 120 seconds with
C-60 cassette tape

CD SECTION

Disc

CD, CD-R, CD-RW, MP3

8 cm/12 cm

Sampling frequency

44.1 kHz

Decoding

16 bit linear

Pickup

Beam source/wavelength Semiconductor laser/780 nm

(For Norge)

Bølgelengde

780 nm

Laserstyrke

Ingen farlig stråling sendes ut

Number of channels

Stereo

Frequency response

20 Hz – 20 kHz (+1 dB, –2 dB)

Wow and flutter

Below measurable limit

Digital filter

8 fs

D/A converter

MASH (1 bit DAC)

MP3

Bit rate

32 kbps – 320 kbps

Sampling frequency

32 kHz, 44.1 kHz, 48 kHz

SPEAKER SECTION

Type

2 way, 2 speaker system

Speaker(s)

Full Range

10 cm cone type

Tweeter

6 cm cone type

Impedance

6Ω

Input power (IEC)

HIGH

70 W (Max)

LOW

70 W (Max)

Output sound pressure level

80 dB/W (1.0 m)

Frequency range

55 Hz – 22 kHz (–16 dB)

70 Hz – 20 kHz (–10 dB)

Dimensions (WxHxD)

128 mm x 250 mm x 222 mm

Mass

1.95 kg

GENERAL

Power supply

For Continental Europe

AC 230 V, 50 Hz

For United Kingdom, Australia and New Zealand

AC 230 V – 240 V, 50 Hz

Power consumption

130 W

Dimensions (WxHxD)

179 mm x 250 mm x 383 mm

Mass

5.24 kg

Power consumption in standby mode: 0.8W

Notes:

- Specifications are subject to change without notice. Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.
- The labels "HIGH" and "LOW" on the rear of the speakers refer to High frequency and Low frequency.

Maintenance

If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.

- Never use alcohol, paint thinner or benzene to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

For a cleaner crisper sound

Clean the heads regularly to assure good quality playback and recording.

Use a cleaning tape (not included).

When moving the unit

- 1 Remove all discs.
- 2 Press [⏻/I] to turn the unit off.
- 3 Disconnect the AC mains lead.